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September 12, 2022

Dear *Nature Sustainability* editors,

Please consider the attached manuscript, “A predator in need is a predator indeed: generalist arthropod predators function as pest specialists at the late growth stage of rice”, for publication as a research article (Article paper) in *Nature Sustainability*. We did not have a prior discussion with a *Nature Sustainability* editor about this manuscript, which is not being considered elsewhere.

While biocontrol has been recognized as a valuable tool for sustainable agriculture, whether generalist predators (ubiquitous in nature) can serve as effective biocontrol agents in pest management remains unclear. To solve this long-standing puzzle, we quantified the diet composition of generalist arthropod predators (GAPs) and identified the underlying mechanisms for predator-pest interactions in rice farms over three consecutive years. We found a high proportion of rice pests in GAPs’ diets in both organic and conventional farms (e.g., 79-95% at the ripening stage), suggesting that these generalist predators function as “specialist predators” at late crop stages (when rice plants are fruiting and pests are abundant). The high pest consumption remained consistent across years regardless of climatic conditions, demonstrating the potential that generalist predators may produce a stable, predictable top-down effect on pests. Overall, our findings provide support for the use of GAPs in pest management for sustainable agriculture, which has become more important than ever in human history.

Our study was rigorously conducted, and our conclusions are well-founded. Specifically, we first sampled arthropod prey and predators in sub-tropical organic and conventional rice farms over the rice growth season in Taiwan from 2017 to 2019. Second, we quantified the diet composition of predators at each rice stage using stable isotope analysis. Third, we investigated how local abiotic and biotic factors may affect pest consumption by GAPs. Our data were analyzed using appropriate statistical methods (e.g., Bayesian stable isotope mixing model and beta regression). To facilitate public data sharing, we will upload all of our data to Figshare at the time of publication.

We believe that the topic of our study falls within the scope of *Nature Sustainability* (e.g., bringing important new insights for sustainable agriculture), and our findings should be of interest to ecologists, agricultural practitioners, and policy makers. We hope that you will share our enthusiasm, and we look forward to your feedback.

The following are suggested reviewers who study similar topics:

Dr. William Snyder

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Expertise: sustainable agriculture, agroecology, biocontrol

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Sincerely,

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